

03050204-050

(*South Fork Edisto River*)

General Description

Watershed 03050204-050 is located in Barnwell, Orangeburg, and Bamberg Counties and consists primarily of the ***South Fork Edisto River*** and its tributaries from Dean Swamp Creek to its confluence with the North Fork Edisto River. The watershed occupies 164,149 acres of the Upper and Lower Coastal Plain regions of South Carolina. The predominant soil types consist of an association of the Fuquay-Varina-Dothan-Johnston-Meggett series. The erodibility of the soil (K) averages 0.17 and the slope of the terrain averages 3%, with a range of 0-6%. Land use/land cover in the watershed includes: 41.7% agricultural land, 32.9% forested land, 18.7% forested wetland (swamp), 4.8% barren land, 1.0% urban land, 0.6% water, and 0.3% nonforested wetland (marsh).

As a reach of the South Fork Edisto River, this watershed accepts the drainage from all streams entering the river upstream. Spur Branch enters the river at the top of the watershed, followed by Whaley Creek (Matthews Millpond), Dry Branch, and the Goodland Creek watershed. Further downstream, Windy Hill Creek (Sheepford Branch) enters the river near the Town of Blackville, followed by Rocky Swamp Creek (Campbell Branch, Pleasant Branch), Rogers Branch, Snake Branch, and Little River (Willow Swamp) near the Town of Norway. Sykes Swamp enters the river next, followed by Hays Mill Creek (Stout Creek), Scratchnose Swamp (Reed Branch), Sucksand Branch, and the Roberts Swamp watershed. Snake Swamp (Sam Branch) and Isaac Jennings Canal flow past the Town of Cope at the base of the watershed to enter the river. There are a total of 333.3 stream miles and 755.3 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
E-011	W/INT	FW	SOUTH FORK EDISTO RIVER AT SC 39
E-029	BIO	FW	WINDY HILL CREEK AT SR 38
RS-01059	RS01	FW	SCRATCHNOSE SWAMP AT S-38-162, 3.4 MI SE OF NORWAY
E-012	S/BIO	FW	SOUTH FORK EDISTO RIVER AT S-38-39 BRIDGE

South Fork Edisto River – There are two SCDHEC monitoring stations along this reach of the South Fork Edisto River. This is a blackwater system, characterized by naturally low pH and dissolved oxygen concentration. Although pH excursions were noted at both sites, they were typical of values seen in such systems and considered natural, not standards violations. Aquatic life and recreational uses are fully supported at the upstream site (***E-011***). At the downstream site (***E-012***), aquatic life uses are fully supported based on macroinvertebrate community data. There is a significant decreasing trend in pH. Prior to 2001, this was a secondary monitoring station and sampling was intentionally biased towards periods with potentially low dissolved oxygen concentrations. Recreational uses are fully supported; however, there is a significant increasing trend in fecal coliform bacteria concentration.

Scratchnose Swamp (RS-01059) – Aquatic life uses fully supported. This is a blackwater system, characterized by naturally low pH and dissolved oxygen concentrations. Although pH excursions were noted, they were typical of values seen in such systems and considered natural, not standards violations. Recreational uses are fully supported.

Windy Hill Creek (E-029) - Aquatic life uses are partially supported based on macroinvertebrate community data.

A fish consumption advisory has been issued by the Department for mercury and includes streams within this watershed (see advisory p.38).

Groundwater Quality

<u>Well #</u>	<u>Class</u>	<u>Aquifer</u>	<u>Location</u>
AMB-100	GB	TERTIARY LIMESTONE	COPE
AMB-002	GB	BLACK CREEK	WILLISTON
AMB-102	GB	TERTIARY SANDS	BLACKVILLE

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD)</i>	<i>NPDES# TYPE COMMENT</i>
SOUTH FORK EDISTO RIVER TOWN OF SPRINGFIELD/PLANT #1 PIPE #: 001 FLOW: 0.120	SC0023272 MINOR DOMESTIC
SOUTH FORK EDISTO RIVER SCE&G/COPE POWER PLANT PIPE #: 001 FLOW: 0.57	SC0045772 MINOR INDUSTRIAL
WINDY HILL CREEK TOWN OF BLACKVILLE WWTP PIPE #: 001 FLOW: 0.80	SC0026417 MINOR DOMESTIC
WINDY HILL CREEK EXCEL COMFORT SYSTEMS, INC. PIPE #: 001 FLOW: M/R	SCG250187 MINOR INDUSTRIAL
WILLOW SWAMP TOWN OF NORWAY PIPE #: 001 FLOW: 0.165	SC0045993 MINOR DOMESTIC WETLAND

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

LANDFILL NAME

FACILITY TYPE

PERMIT #

STATUS

SCE&G COPE STATION
INDUSTRIAL

383320-1601
ACTIVE

Growth Potential

There is a low potential for growth in this watershed, which contains the Towns of Norway and Cope, and portions of the Towns of Springfield, Blackville, Denmark, Bamberg, and Neeses. Slight increases in commercial growth would be possible with the proposed widening of U.S. 78, which runs from the Town of Denmark to the Town of Bamberg. Industrial growth is possible due to the rail lines already in place. One rail line runs from the Town of Blackville to the Town of Springfield, and another from Denmark to the Town of Norway and on upstate to the City of Columbia. U.S. 321 parallels the rail line that bisects the watershed. The Town of Denmark shows declining population trends, but the Town of Bamberg shows slightly increasing population growth. The SCE&G Cope Power Plant could boost residential and commercial growth in the area, primarily for the Town of Bamberg.